

LISTING OF THE CLAIMS:

Claims 1-8 (Cancelled)

9. (Previously presented) A management protocol proxy between a private network and a global network, the private and global networks being connected via an Internet Protocol (IP) Network Address Translator (NAT) for translating between a private address system of the private network and a global address system of the global network, the management protocol proxy comprising:

an address translation processing unit that receives a packet containing management protocol data transmitted from a monitored apparatus on the private network, and translates a transmission source address contained in the received packet into a virtual address belonging to a management address system different from the private and global address systems to form management protocol proxy data comprising the virtual address and the management protocol data;

an assembly/disassembly processing unit that generates a management protocol proxy data packet including the management protocol proxy data, an address of the management protocol proxy as a transmission source address of the management protocol proxy data packet, and an address of another management protocol proxy as a transmission destination address of the management protocol proxy data packet; and

an interproxy communication unit that transmits the management protocol proxy data packet to said another management protocol proxy designated by the transmission destination address, via the global network.

10. (Previously presented) The management protocol proxy according to claim 9, further comprising:

an address translation definition defining correspondence relationships between addresses belonging to the management address system and real addresses,

wherein the address translation processing unit translates the transmission source address contained in the received packet into the virtual address, based on the address translation definition.

11. (Currently amended) The management protocol proxy according to claim 10, wherein the address translation processing unit further translates address information in data contained in the received packet ~~[[of]]~~ containing management protocol data.

12. (Currently amended) The management protocol proxy according to claim 11, wherein:

the received packet containing management protocol ~~[[is]]~~ data comprises a Simple Network Management Protocol (SNMP) message, and

~~the received packet comprises an SNMP message, and~~

the management protocol data ~~contained in the received packet~~ comprises a Protocol Data Unit (PDU).

13. (Previously presented) The management protocol proxy according to claim 12, wherein the address translation processing unit translates address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) definition statement of a MIB object to be translated.

14. (Previously presented) The management protocol proxy according to claim 9, wherein:

said another management protocol proxy comprises an address translation definition in defining correspondence relationships between real addresses and addresses belonging to the management address system, and

an address translation processing unit of said another management protocol proxy translates the virtual address, based on the address translation definition of said another management protocol proxy.

15. (Currently amended) The management protocol proxy according to claim 14, wherein:

the received packet containing management protocol ~~[[is]]~~ data comprises a Simple Network Management Protocol (SNMP) message, and

~~the received packet comprises an SNMP message, and~~

the management protocol data ~~contained in the received packet~~ comprises a Protocol Data Unit (PDU).

16. (Previously presented) The management protocol proxy according to claim 15, wherein the address translation processing unit of said another management proxy translates address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

17. (Previously presented) The management protocol proxy according to claim 9, wherein the management protocol proxy comprises a proxy server.

18. (Cancelled)

19. (Previously presented) A method of performing network management between a private network and a global network, the private and global networks being connected via an Internet Protocol (IP) Network Address Translator (NAT) for translating between a private address system of the private network and a global address system of the global network, the method comprising:

translating a transmission source address of a packet containing management protocol data received from a monitored apparatus on the private network to a virtual address belonging to a management address system different from the private and global address systems to form management protocol proxy data comprising the virtual address and the management protocol data;

generating a management protocol proxy data packet including the management protocol proxy data, an address of a management protocol proxy which is between the private and global networks as a transmission source address of the management protocol proxy data packet, and an address of another management protocol proxy as a transmission destination address of the management protocol proxy data packet; and

transmitting the management protocol proxy data packet to said another management protocol proxy designated by the transmission destination address, via the global network.

20. (Previously presented) The method according to claim 19, wherein:
the translating comprises translating the transmission source address contained in the received packet to the virtual address, based on an address translation definition; and
the address translation definition defines correspondence relationships between addresses belonging to the management address system and real addresses.

21. (Previously presented) The method according to claim 20, further comprising translating address information in data contained in the received packet.

22. (Currently amended) The method according to claim 21, wherein:
the received packet containing management protocol ~~[[is]]~~ data comprises a Simple Network Management Protocol (SNMP) message, and
~~the received packet comprises an SNMP message, and~~
the management protocol ~~data contained in the received packet~~ comprises a Protocol Data Unit (PDU).

23. (Previously presented) The method according to claim 22, wherein the translating comprises translating address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

24. (Previously presented) The method according to claim 19, further comprising:

translating the virtual address contained in the packet of management protocol proxy data at said another management protocol proxy, based on an address translation definition of said another management protocol proxy;

wherein the address translation definition of said another management protocol proxy defines correspondence relationships between real addresses and addresses belonging to the management address system.

25. (Currently amended) The method according to claim 24, wherein:

the received packet containing management protocol data comprises a Simple Network Management Protocol (SNMP) message, and

~~the received packet comprises an SNMP message, and~~

the management protocol data ~~contained in the received packet~~ comprises a Protocol Data Unit (PDU).

26. (Previously presented) The method according to claim 25, wherein the translating of the virtual address at said another management protocol proxy comprises translating address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

27. (Cancelled)

28. (Previously presented) A program product comprising a computer readable storage medium and executable programming embodied on the medium, wherein execution of

the programming causes a programmable device to perform steps for operation as a management protocol proxy between a private network and a global network connected via an Internet Protocol (IP) Network Address Translator (NAT) for translating between a private address system of the private network and a global address system of the global network, the steps comprising:

translating a transmission source address of a packet containing management protocol data received from a monitored apparatus on the private network to a virtual address belonging to a management address system different from the private and global address systems to form management protocol proxy data comprising the virtual address and the management protocol data;

generating a management protocol proxy data packet including the management protocol proxy data, an address of the management protocol proxy as a transmission source address of the management protocol proxy data packet, and an address of another management protocol proxy as a transmission destination address of the management protocol proxy data packet; and

transmitting the management protocol proxy data packet to said another management protocol proxy designated by the transmission destination address, via the global network.

29. (Previously presented) The product according to claim 28, wherein:

the translating comprises translating the transmission source address contained in the received packet to the virtual address, based on an address translation definition; and

the address translation definition defines correspondence relationships between addresses belonging to the management address system real addresses.

30. (Previously presented) The product according to claim 29, wherein the steps performed further comprise translating address information in data contained in the received packet.

31. (Currently amended) The product according to claim 30, wherein:
the received packet containing management protocol ~~[[is]]~~ data comprises a Simple Network Management Protocol (SNMP) message, and
~~the received packet comprises an SNMP message, and~~
the management protocol ~~data contained in the received~~ comprises a Protocol Data Unit (PDU).

32. (Previously presented) The product according to claim 31, wherein the translating comprises translating address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

33. (Previously presented) The product according to claim 28, wherein:
the steps performed further comprise translating the virtual address at said another management protocol proxy, based on an address translation definition of said another management protocol proxy; and

the address translation definition of said another management protocol proxy defines correspondence relationships between real addresses and addresses belonging to the management address system.

34. (Currently amended) The product according to claim 33, wherein:

the received packet containing management protocol data comprises a Simple Network Management Protocol (SNMP) message, and

~~the received packet comprises an SNMP message, and~~

the management protocol data ~~contained in the received packet~~ comprises a Protocol Data Unit (PDU).

35. (Previously presented) The product according to claim 34, wherein the translating of the virtual address at said another management protocol proxy comprises translating address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

36. (Cancelled)